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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,113	07/10/2001	R. Terry K. Baker	1.902.12	8204

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EXAMINER

HENDRICKSON, STUART L

ART UNIT PAPER NUMBER

1754

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

902113

Applicant(s)

Baker

Examiner

Nerbitsky

Group Art Unit

1759

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 12/5/03
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 9-20 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 9-20 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 9-11, 15-17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Audier et al. article.

Audier teaches on pgs. 220-221 and 223 in particular conical-faceted shaped nanotubes, which are crystalline. Although the product is not described identically, no differences are seen due to the similarity in synthesis and structure reported. The surface groups are present by virtue of the well known reactivity of edge groups with air.

Claims 11-14, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Audier et al. taken with Kaner et al.

Audier does not explicitly teach surface groups, however Kaner teaches introducing groups to functionalize the fibers to make them more useful. Note in particular column 10; the examiner takes Official Notice that the claimed groups are old and known and described as groups on carbon fibers.

Claims 9-11, 13-17, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez et al. 5653951.

Rodriguez teaches in columns 3 and 11 what appears to be the same product; choosing to have the planes aligned with the fiber axis is an obvious expedient, as it is suggested by the reference. The surface groups are present by virtue of the well known reactivity of edge groups with air.

Claims 9-11, 13-17, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al. 5618875.

Baker teaches in column 11 what appears to be the same product; choosing to make the planes parallel to the fiber axis is an obvious expedient, as it is suggested by the reference. The surface groups are present by virtue of the well known reactivity of edge groups with air.

Applicant's arguments filed 12/5/03 have been fully considered but they are not persuasive.

The claims do not recite the argued features of stacked versus nested planes which are not hollow or concentric, and which are planar and the same size. Further, the claims do not exclude planes stacked perpendicular to the fiber axis.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (571) 272-1351.



Stuart Hendrickson  
examiner Art Unit 1754